

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/637,140
Applicant : Kazuaki Mino
Filed : August 8, 2003
Patent No. : 7,204,893
Issue Date : April 17, 2007
Title : COPPER BASE ALLOY CASTING, AND METHODS FOR PRODUCING
CASTING AND FORGING EMPLOYING COPPER BASE ALLOY CASTING

Conf. No. : 4481
TC/A.U. : 1742
Examiner : Sikyin Ip

Customer No. : 14684
Docket No. : SHG-33394US1

LETTER REGARDING PATENT PRINTING ERRORS

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

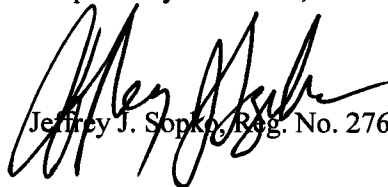
Sir:

In proofreading the referenced patent, typographical errors were noted. It is not believed that these errors require a Certificate of Correction. However, it is respectfully requested that this letter be placed in the file for this case.

The following errors were noted:

In Column 10, Line 16, please delete "forging", and insert therefor --forgings--

Respectfully submitted,


Jeffrey J. Sopko, Reg. No. 27676

JJS: id
Enclosure (*supporting documents*)

Pearne & Gordon LLP
1801 East 9th Street
Suite 1200
Cleveland, OH 44114-3108

Date: October 9, 2007

For comparison, identical forging was carried out on the test material in Comparative Example 1 which did not include Ag, to produce the forging in Comparative Example 9.

Tensile tests were carried out on each of these forgings in the same manner as in Example 4. The tensile proof results are shown in Figure 5 and the increase in tensile elongation results are shown in Figure 6.

The forging in Example 7 demonstrated higher strength than the forging in Comparative Example 9 that did not include Ag over the whole range of measured temperatures. The forging of Example 7 demonstrated the same high value for thermal conductivity at 300 °C as the casting employing the copper base alloy in Example 1. (Experiment 6)

Production-2 for forging (hot rolling)

The copper base alloy test material in Example 1 was melted, the molten material was poured into a casting mold, and solidified. The obtained ingots were rolled at 750 °C from a thickness of 40 to 20 mm, and then rolled further at 500 °C to a thickness of 10 mm. Next, precipitation strengthening was carried out by maintaining at 480 °C for one hour, followed by cooling to room temperature to produce the forging in Example 8.

For comparison, identical forging was carried out on the test material in Comparative Example 1 which did not include Ag, to produce the forging in Comparative Example 10.

Tensile tests were carried out on each of these forgings in the same manner as in Example 4. The tensile proof results are shown in Figure 7 and the increase in tensile elongation results are shown in Figure 8.